

NWS Form E-5 (04-2006) (PRES. BY NWS Instruction 10-924)	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE	HYDROLOGIC SERVICE AREA (HSA) Burlington VT
MONTHLY REPORT OF HYDROLOGIC CONDITIONS		REPORT FOR: MONTH YEAR December 2012
TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283		SIGNATURE /s/ Gregory A. Hanson, SH WFO BTW DATE January 11 2013

When no flooding occurs, include miscellaneous river conditions below the small box, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924).

☒ An X inside this box indicates that no flooding occurred within this hydrologic service area.

Winter arrived in the North Country during December. The first half of the month saw above normal temperatures and liquid precipitation. However by the holiday season temperatures cooled to near normal and precipitation fell in the form of snow. Rivers saw only slight rises early in the month from the occasional rainfall, and then became ice covered with the return of cold temperatures.

On December 4 and again on the 10th, cold frontal passages produced .5 to 1.0" inches of precipitation, falling mostly as rain. Rivers saw rises of two to three feet as a result of the runoff.

River levels then slowly fell through mid-month, despite precipitation from a slow moving low pressure system that affected the area from December 16 through 19. The storm produced upwards of an inch of precipitation, however much of that was in the form of snow and rivers showed little response.

The last river rises of the month were on December 22 and 23, following an occluded low pressure system producing a mix of rain and snow on the 21st. Up to an inch of precipitation fell, and rivers in central and southern Vermont rose two to three feet. In far northern Vermont and New York temperatures remained below freezing and runoff was limited.

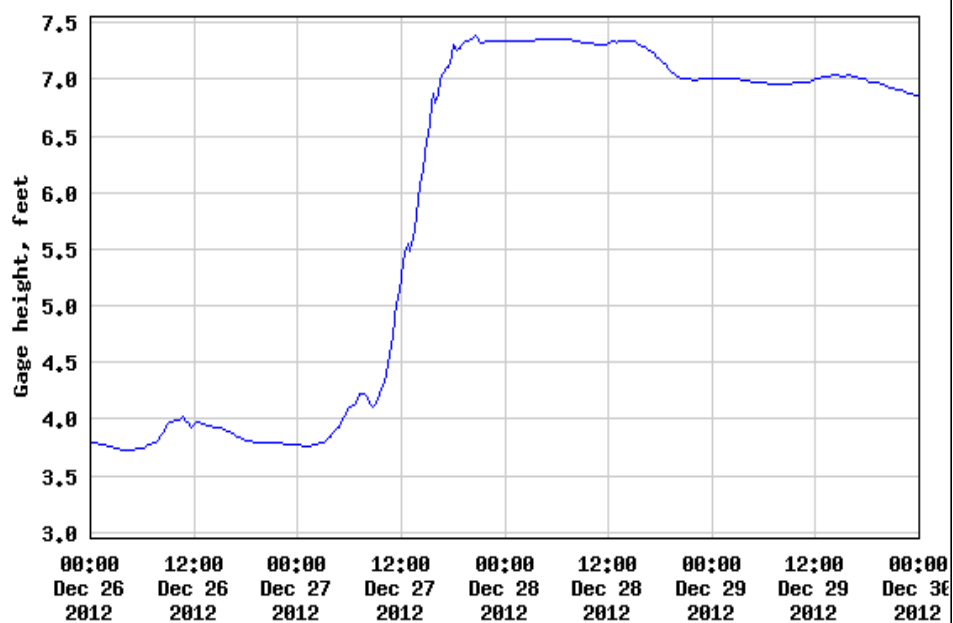
For the rest of the month temperatures fell below freezing and flows remained constant or slowly fell. Weak clipper type systems added a few inches to the snowpack over higher terrain from the 22nd to 24th, then a Nor'easter dumped 10 to 20 inches of snow and up to an inch of liquid precipitation. Another southern tracking low pressure system added a half inch of liquid to the snowpack in 4 to 8 inches of snow.

Some river gages showed evidence of river ice development or freeze-up ice jams the last few days of the month with within-bank rises not related to runoff, followed by steady levels or slow recession (Figs 1 & 2).

Lake Champlain levels rose slowly during December in response to the liquid precipitation. The Lake began December around 95 feet, and reached 96 feet by month's end. The levels and slow rising trend were consistent with normal levels for December.



USGS 04293500 MISSISQUOI RIVER NEAR EAST BERKSHIRE, VT

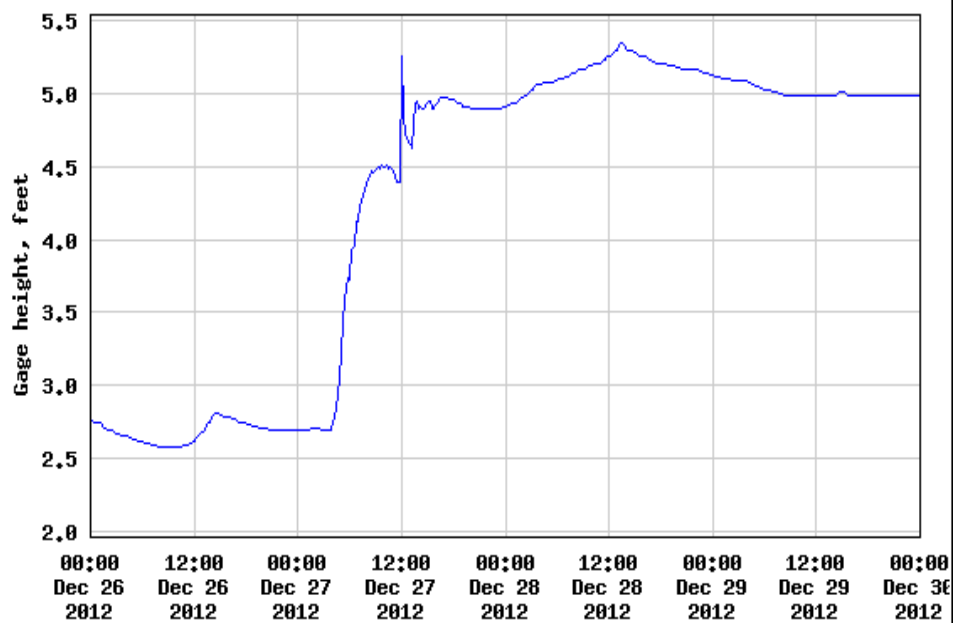


----- Provisional Data Subject to Revision -----

Figure 1



USGS 04271500 GREAT CHAZY RIVER AT PERRY MILLS NY



----- Provisional Data Subject to Revision -----

Figure 2

Significant River Crests
July 2011
WFO Burlington VT

-none-